

REMARKS

The Examiner is thanked for the careful examination of the application, and for withdrawing the rejections of the previous Office Action. However, in view of the following remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections. Claim 13 is amended to correct an obvious error.

Claims 1, 2, 5, and 13 have been rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,371,610, hereinafter Sugawa. Claim 1 of the present application defines an image processing apparatus for correcting data of each pixel in an edge area. The claimed apparatus includes, among other elements, a first judgment unit for judging whether a target pixel is in a first edge area and a second judgment unit for judging whether the target pixel is in a second edge area having a lower intensity variation level than the first edge area.

The Examiner alleges that Sugawa discloses the two judgment units at column 4, lines 40-65. However, Sugawa discloses an image data processing apparatus having an image discriminator 25 (see Figures 2 and 4) that is used to determine certain characteristics of the image data.

Specifically, the binary attribute discriminator 251 within the image discriminator 25 determines whether or not the image data relates to a character image or to a halftone image. As illustrated in Figure 5, the binary attribute discriminator 251 includes a memory 2511, an edge detector 2512, and an edge discriminator 2513. The image data from the memory 2511 is passed through the edge detector 2512, which outputs a value referred to as an "edge detection amount." See column 4, lines 56-59. The edge detection amount is then input into the edge discriminator 2513 which determines, based on the edge detection amount,

whether the pixel in question belongs to a character area or a halftone area. See column 4, lines 59-65.

Accordingly, Sugawa uses an image discriminator 25 to determine whether or not the image is a character image or a halftone image based on the output of a single edge detector 2512.

The Examiner alleges that Sugawa teaches a first judgment unit for judging whether a target pixel is in a first edge area and a second judgment unit for judging whether the target pixel is in a second edge area having a lower intensity variation level than the first edge area. However, Sugawa includes only one edge detector, i.e., element 2512, which merely outputs an edge detection amount, from which the edge discriminator 2513 determines whether or not the image is a character image or a halftone image. Accordingly, Sugawa does not teach or suggest the claimed first and second judgment units.

Since Sugawa does not teach or suggest the claimed first and second judgment units, Sugawa also cannot teach or suggest the first and second correction units as defined in claim 1. Accordingly, claim 1 and dependent claims 2 and 5 are patentable over Sugawa.

Claim 13 defines an image processing method that involves judging whether a target pixel is in the first edge area and judging whether the target pixel is in a second edge area having a lower intensity variation level than the first edge area. The method further comprises conducting first correction processing on data of the target pixel that is judged to be in the first edge area and second correction processing on the target pixel that is judged to be in the second edge area. In view of the fact that Sugawa does not teach or suggest the two judgment units, as

discussed above with respect to claim 1, Sugawa also cannot teach or suggest the method of claim 13.

Claims 3, 4, and 6-12 have been rejected under 35 U.S.C. §103(a) as being obvious over Sugawa in view of U.S. Patent No. 5,357,353, hereinafter Hirota. The Examiner relies on Hirota for an alleged teaching of the data including chromatic color component data and achromatic color component data and the second correction unit that conducts correction processing only on the achromatic color component data. However, that portion of Hirota does not work on the deficiency of Sugawa as set forth above with respect to claim 1. Accordingly, the dependent claims 3, 4, and 6-12 are also patentable over the applied prior art.


Claim 13 has been amended to correct an obvious error.

In view of the foregoing remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejection. In the event that there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: March 28, 2007

By: 
William C. Rowland
Registration No. 30888

P.O. Box 1404
Alexandria, VA 22313-1404
703.836.6620